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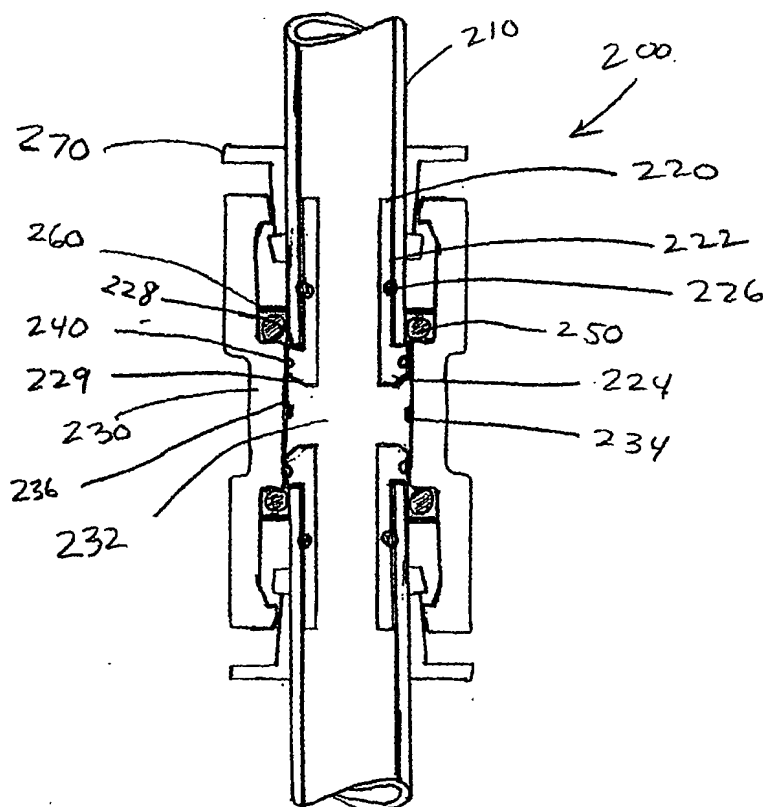
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[Continued on next page]

(54) Title: INTEGRALLY HOUSED TUBE INSERT



(57) Abstract: A tube coupling that has a tube  
insert (220) which is integrally housed within  
a coupling body (230). The tube insert (220)  
is partly comprised of an elongated stem (222)  
encircled by a sealing o-ring (226) that forms a  
seal with a tube (210) inserted into the coupling  
body (230) and over the tube insert (220).

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

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17 February 2005

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/07247

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : F16L 21/06

US CL : 285/322,323,374

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 285/322, 323, 374

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,142,538 A (VOLGSTADT et al) 07 November 2000, see entire document.	1-17
X	US 5,511,830 A (OLSON et al ) 30 April 1996, see entire document.	1-5, 10, 17

☐ Further documents are listed in the continuation of Box C.

See patent family annex.

**\* Special categories of cited documents:**

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;"

document member of the same patent family

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/07247

## Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claim Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claim Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:  
Please See Continuation Sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-17

Remark on Protest

☐  
☐

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

**BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING**

Group I, claims 1-17, drawn to a tube coupling, a coupling system, and a method of fluidly sealing a tube in a coupling body.

Group II, claims 18-20, drawn to a method of advertising.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Group I is drawn to a tube coupling and a method of sealing a tube in a coupling body. Group II is drawn to a method of advertising, which requires providing instructions on how to house a tube insert in a coupling, providing a product insert and posting instructions on a web site. The inventive concept for Group I is effecting a tube coupling. The inventive concept for Group II is providing advertising with a tube coupling.